PROGRAM:	**Electronic Technology**
PROGRAM CIP CODE:	**15.0300**
DESCRIPTION:	**The Electronic Technology program is designed to prepare students to apply basic engineering principles and technical skills in support of electrical, electronics and communication engineers. Includes instruction in electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration and report preparation, in addition to technical skills, students completing this program will also develop advanced critical thinking, applied academic, career development, life management, business, economic and leadership skills required for Electronic Technology occupations.**

RECOMMENDED PROGRAM SEQUENCE OF COURSES:

Career Preparation Grades 11-12	**The following describes the recommended courses developed from industry-validated skills necessary for initial employment or continued related education.**

15.0300.10 **Electronic Technology Core Curriculum: Students will learn basic safety principles and practices used in electronic manufacturing industries and/or repairing electronic equipment. Students will learn how to use basic hand tools, test equipment and troubleshooting techniques. Other units of instruction include basic math through trigonometry, reading and interpreting schematic diagrams and technical drawings, soldering-desoldering techniques and other basic assembly skills.**

-and-

15.0300.20 **Basic Electricity Principles and Applications: This course includes units of instruction in basic concepts, electrical quantities and units, basic circuits, laws and measurements, circuit components, multiple-load circuits, complex-circuit analysis, magnetism, alternating current and voltage, power in AC circuits, capacitance, inductance, transformers, RCL circuits, electric motors, and test equipment.**

-and-

15.0300.25   **Basic Electronic Principles and Applications:** This course includes units of instruction in semiconductors, diodes, power supplies, transistors, small-signal amplifiers, large-signal amplifiers, operational amplifiers, oscillators, communications theory, integrated circuits, silicon-controlled rectifiers, regulated power supplies and digital signal processing.

And program may elect to add:

15.0300.75   **Electronic Technology - Internship:** This course provides CTE students an opportunity to engage in learning through participation in a structured work experience that can either be paid or unpaid and does not necessarily require classroom instruction that involves the application of previously developed Electronic Technology knowledge and skills.

-or-

15.0300.80   **Electronic Technology - Cooperative Education:** This course utilizes a cooperative education methodology to combine school-based and supervised work-based learning experiences directly related to the standards identified for the Electronic Technology program.

TEACHER CERTIFICATION REQUIREMENTS FOR THE ELECTRONIC TECHNOLOGY PROGRAM		
CAREER PREPARATION: The instructor must be CTE certified according to the following table		
		CERTIFICATES
Electronic Technology	**Types: BVT, SVT** **Approved Areas: ITE, VTT**	**Types: PVI, SVI, PCTI, SCTI** **No Approvals Necessary**
Note: ▪ **Electronic Technology, 15.0300.70 may be a part of the sequence and the teacher must hold a Cooperative Education Endorsement (CEN).** ▪ **Teacher/Coordinator 15.0300.75 is not required to have a Cooperative Education Endorsement (CEN).** ▪ **Teacher/Coordinator 15.0300.80 is required to have a Cooperative Education Endorsement (CEN).**		

CERTIFICATE ABBREVIATIONS FOR THE ELECTRONIC TECHNOLOGY PROGRAM			
Certificate Types		**Approved Areas List**	
BVT	**Basic Vocational Education**	ITE	**Industrial Technology Education**
PCTI	**Provisional Career and Technical Education Industrial Technology**	VTT	**Vocational Trade and Technical Education**
PVI	**Provisional Vocational Industrial Technology**		
SCTI	**Standard Career and Technical Education Industrial Technology**		
SVI	**Standard Vocational Industrial Technology**		
SVT	**Standard Vocational Education**		